

ABSTRACT

The present invention is directed to artificial antigen presenting cells and methods of making artificial antigen presenting cells. Such artificial antigen presenting cells may be used in certain methods of isolating and expanding T cell populations as well as
5 modulating T cell responses. Additionally, the present invention provides novel methods for the identification and isolation of antigen-specific T cells. The methods provide for the construction of liposomes containing MHC:peptide complexes, accessory molecules, co-stimulatory molecules, adhesion molecules, and other molecules irrelevant to T cell binding or modulation that are used in the binding of artificial antigen presenting cells to
10 solid support systems that may be used in the retrieval and identification of antigen-specific T cells. Additionally, the present invention is directed to devices and methods for treating conditions which would benefit from modulation of T cell response, for example, autoimmune disorders, allergies, cancers, viral infections, and graft rejection.